

REMARKS

This Amendment/Response is prepared in response to the first Office action mailed on 4 April 2008 (Paper No. 20080227).

Claims 11, 16, 23 and 24 have been amended by this Amendment.

Claimed Objections

Claim 23 is objected to do to informality. Taking the exam or his comments into consideration, claim and 23 has been amended. Therefore, withdrawal of the objection to claim 23 is respectfully requested.

Claim Rejection Under 35 U.S.C. § 102

Claims 1-25 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 7,280,530 by Chang *et al.*

The present invention relates to a VoIP call control apparatus in a PBX (Private Branch eXchange) and a method thereof is capable of an effective charge management by differentiating bandwidth allocation according to a service level. The VoIP call control apparatus in a PBX includes: a service class decision unit for receiving a VoIP call service request from a subscriber, deciding a service class, and outputting the service class; a service level decision unit for measuring a service level of a VoIP trunk and outputting the service level; a C/O matching unit for matching a PSTN network and the PBX; a VoIP gateway for performing a protocol matching process with respect to an outgoing call from the PBX, and providing a voice call conforming to VoIP protocol; a G/W matching unit for matching the VoIP gateway and the PBX; and a signal

processing unit for deciding whether the VoIP call with the service class transmitted from the service decision unit can be serviced in the service level of the VoIP trunk transmitted from the service level decision unit, and if the VoIP call is serviceable, providing a VoIP call service through the G/W matching unit and the VoIP gateway, and if the VoIP call is not serviceable, providing a voice call service over the PSTN network via the C/O matching unit.

The primary reference cited by the Examiner is Chang *et al.* (U.S. Patent No. 7,280,530), which relates to An integrated voice gateway system for use within a company which can route a voice telephone call between parties at two different locations over an IP network or over the PST NETWORK. The system can route a voice telephone call from a first location within the system to a second location within the system via the IP network, and then from the second location to a third location via the PST NETWORK. The integrated voice gateway system includes a gateway server which serves as an intranet/Internet telephony gateway. The gateway server routes intra-company voice or facsimile (fax) calls, over the company's intranet or the public Internet. The gateway server provides an alternate voice network to the PST NETWORK for a company. This alternate network is provided at a much lower cost. The gateway server is a combination of hardware and software components which reside on a PC server platform. The gateway server is coupled to a customer premise telephone system, i.e. a PBX via a T1 or E1 trunk for larger systems, or an analog trunk for smaller systems. The gateway server is coupled to the company's intranet via industry standard connections. The gateway servers in a multi-site company are coupled together via the company's intranet or wide area network (WAN) into a gateway network. The gateway server uses PBX call status links to provide many unique and useful features which are otherwise unavailable. The gateway server uses T1 inband ANI, PRI, QSIG or industry

standard CTI applications programming interfaces (API) and works with any PBX which supports any of these call status links. The gateway server is equipped with a database of user and gateway objects and attributes, and provides many unique features including caller's name based on caller phone number, address translation, gateway network routing information, user authentication, etc. This database can be integrated with industry standard enterprise directory services systems including any directory which supports the Lightweight Directory Access Protocol (X.500) (LDAP) interface.

The present invention differs from the prior art for numerous reasons two of which are recited in paragraph 0088 of the present specification. Paragraph 0088 states,

[0088] In addition, when the subscriber requests a call connection, the service class decision unit 210 looks up the subscriber service class table to find out the class of service of the subscriber, and outputs the result to the signal processing unit 220. Also, the service class unit 210 decides class of the service by looking up the service class table per call type, and outputs the result to the signal processing unit 220. (Emphasis Added)

In other words, the present invention will determine whether it is possible to establish a voice over Internet protocol call based on a subscriber's priority, class of service for the subscriber and call type which includes international calls, long-distance calls and headquarters to branch calls. Chang et al. fails to describe anything related to determining whether it is possible to place a voice over Internet protocol call based on priority, subscriber class of service, or the nature of the call.

The only instance where Chang et al. concerns itself with the priority of a call is mentioned in column 47, lines 27-30, which states;

If a called party has multiple callback requests pending, then the callbacks may be serviced on a first-in-first-out (FIFO) basis, or on a priority basis, e.g. based on class of service of the caller, urgency, etc.

Therefore, Chang et al. fails to describe the aforementioned features.

Regarding independent claim 1, as discussed above Chang et al. fails to describe the deciding a service class that indicates priority. Therefore, the Examiner's grounds of rejection as related to independent claim 1 is respectfully traversed. Claim 1 patentably distinguishes over the prior art of record, by reciting,

“A voice over Internet protocol call control apparatus in a voice over Internet protocol private branch exchange, the apparatus comprising: a service class decision unit for receiving a voice over Internet protocol call service request from a subscriber, deciding a service class for indicating priority of a voice over Internet protocol call service, and outputting the service class; a service level decision unit for measuring band width usage of the voice over Internet protocol trunk, deciding a service level according to the band width usage so as to determine which service classes can use the voice over Internet protocol call service, and outputting the service level; and a signal processing unit for deciding whether the voice over Internet protocol call with the service class transmitted from the service class decision unit can be serviced in the service level of the voice over Internet protocol trunk transmitted from the service level decision unit, and when the voice over Internet protocol call is serviceable, providing a voice over Internet protocol call service and when the voice over Internet protocol call is not serviceable, providing a voice call service over the public switched telephone network.” (Emphasis Added)

With regard to independent claims 11, 16 and 24 Chang et al. fails to disclose establishing a voice over Internet protocol call based on a subscriber's priority, class of service for the subscriber or call type which includes international calls, long-distance calls and headquarters to branch calls. Therefore, independent claims 11, 16 and 24 patentably distinguishes over the prior art of record by reciting, as exemplified by claims 11,

“A voice over Internet protocol call control method in a private branch exchange, the method comprising the steps of: in the private branch exchange, when a subscriber sends a voice over Internet protocol call service request, deciding a voice over Internet protocol service class; deciding whether the voice over Internet protocol call service can be provided in a voice over Internet protocol trunk service level corresponding to the voice over Internet protocol service class; when the voice over Internet protocol call service cannot be

provided, providing a voice call service through a public switched telephone network, and when the voice over Internet protocol call service can be provided, looking up an available voice over Internet protocol trunk port and providing the voice over Internet protocol call service through the voice over Internet protocol trunk; and when providing the voice over Internet protocol call service, changing the voice over Internet protocol trunk service level, wherein said service class is determined by accessing a subscriber service class table to determine a class of service for a subscriber and the service level is based on a call type which is defined as international calls, long-distance calls and headquarters-to-branch calls.” (Emphasis Added)

Therefore, withdrawal of the rejection of claims 1-25 under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 7,280,530 by Chang *et al.* is respectfully requested.

Conclusion

Additional references were cited by the Examiner but not utilized in the rejection of the claims and accordingly, no further comment on these references is necessary.

No other issues remaining, reconsideration and favorable action upon all of the claims now present in the application is respectfully requested. Should any questions remain unresolved, the Examiner is requested to telephone Applicants' undersigned attorney.

No fee is incurred by this Amendment.

Respectfully submitted,



Robert E. Bushnell,
Attorney for the Applicants
Registration No.: 27,774

1522 "K" Street N.W., Suite 300
Washington, D.C. 20005
(202) 408-9040

Folio: P56963
Date: 6/13/08
I.D.: REB/GNS